WHAT IS CLAIMED IS:

1. A method comprising:

receiving, from a receiver, a Quadrature Amplitude Modulated (QAM) signal, wherein the signal comprises a pilot channel and a supplemental channel that includes traffic of a user and at least one other user, and wherein the signal is received over at least one slot; and

estimating an amplitude of a signal constellation of the QAM signal over one of at least one of the at least one slot and fractions of the at least one slot based upon a speed of the receiver.

2. A method according to Claim 1, wherein estimating an amplitude comprises:

estimating an expectation of a power of a signal combination of a traffic symbol and a pilot symbol, wherein the expectation is estimated over one of at least one of the at least one slot and fractions of the at least one slot;

estimating a bias based upon an energy of a difference between two consecutive pilot symbols and an energy of the current pilot symbol, wherein the bias is estimated over the at least one slot; and

estimating the amplitude based upon the expectation of the power of the signal combination and the bias.

3. A method according to Claim 2, wherein estimating the expectation comprises estimating the expectation over one of at least one of the at least one slot and fractions of the at least one slot based upon a number of symbols in the estimate and a number of active Walsh channels in the QAM signal.

4. A method according to Claim 3, wherein estimating the expectation comprises:

determining the power of a signal combination of a traffic symbol and a pilot symbol for each symbol in the estimate for each active Walsh channel;

summing the powers for the symbols for each active Walsh channel into a total power for each active Walsh channel;

summing the total powers for the active Walsh channels into; and

averaging the aggregate power over the active Walsh channels

wherein determining the power, summing the powers, summing the total powers and averaging the aggregate power occur over one of at least one of the at least one slot and fractions of the at least one slot.

5. A method according to Claim 1, wherein estimating the amplitude comprises estimating the amplitude based upon a power of a signal combination of a traffic symbol and a pilot symbol.

6. A method according to Claim 1 further comprising:

demodulating the traffic of the user in the supplemental channel of the QAM signal based upon the estimate of the amplitude.

7. A system comprising:

a receiver capable of receiving a Quadrature Amplitude Modulated (QAM) signal, wherein the signal comprises a pilot channel and a supplemental channel that includes traffic of a user and at least one other user, and wherein the receiver is capable of receiving the signal over at least one slot; and

a demapping element in electrical communication with the receiver, wherein the demapping element is capable of estimating an amplitude of a signal constellation of the QAM signal over one of at least one of the at least one slot and fractions of the at least one slot based upon a speed of the receiver.

8. A system according to Claim 7, wherein the demapping element is capable of estimating an expectation of a power of a signal combination of a traffic symbol and a pilot symbol, the expectation being estimated over one of at least one of the at least one slot and fractions of the at least one slot, wherein the demapping element is also capable of estimating a bias based upon an energy of a difference between two consecutive pilot

symbols and an energy of the pilot symbol, the bias being estimated over the at least one slot, and wherein the demapping element is capable of estimating the amplitude based upon the expectation of the power of the signal combination and the bias.

9. A system according to Claim 8, wherein the demapping element is capable of estimating the expectation over one of at least one of the at least one slot and fractions of the at least one slot based upon a number of symbols in the estimate and a number of active Walsh channels in the QAM signal.

10. A system according to Claim 9, wherein the demapping element is capable of estimating the expectation by:

determining the power of a signal combination of a traffic symbol and a pilot symbol for each symbol in the estimate for each active Walsh channel into a total power for each active Walsh channel;

summing the powers for the symbols for each active Walsh channel into a total power for each active Walsh channel, and thereafter summing the total powers for the active Walsh channels into; and

averaging the aggregate power over the active Walsh channels,

and wherein the demapping element is capable of determining the power, summing the powers, summing the total powers and averaging the aggregate power over one of at least one of the at least one slot and fractions of the at least one slot.

11. A system according to Claim 7, wherein the demapping element is capable of estimating the amplitude based upon a power of a signal combination of a traffic symbol and a pilot symbol.

12. A system according to Claim 7 further comprising:

a master controller in electrical communication with the demapping element, wherein the master controller is capable of demodulating the traffic of the user in the supplemental channel of the QAM signal based upon the estimate of the amplitude.

13. A computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program portions comprising:

a first executable portion capable of receiving, from a receiver, a Quadrature Amplitude Modulated (QAM) signal, wherein the signal comprises a pilot channel and a supplemental channel that includes traffic of a user and at least one other user, and wherein the first executable portion is capable of receiving the signal over at least one slot; and

a second executable portion for estimating an amplitude of a signal constellation of the QAM signal over one of at least one of the at least one slot and fractions of the at least one slot based upon a speed of the receiver.

14. A computer program product according to Claim 13, wherein the second executable portion estimates the amplitude by:

estimating an expectation of a power of a signal combination of a traffic symbol and a pilot symbol, wherein the expectation is estimated over one of at least one of the at least one slot and fractions of the at least one slot;

estimating a bias based upon an energy of a difference between two consecutive pilot symbols and an energy of the current pilot symbol, wherein the bias is estimated over the at least one slot; and

estimating the amplitude based upon the expectation of the power of the signal combination and the bias.

15. A computer program product according to Claim 14, wherein the second executable portion estimates the expectation over one of at least one of the at least one slot and fractions of the at least one slot based upon a number of symbols in the estimate and a number of active Walsh channels in the QAM signal.

16. A computer program product according to Claim 15, wherein the second executable portion estimates the expectation by:

determining the power of a signal combination of a traffic symbol and a pilot symbol for each symbol in the estimate for each active Walsh channel;

summing the powers for the symbols for each active Walsh channel into a total power for each active Walsh channel;

summing the total powers for the active Walsh channels into; and

averaging the aggregate power over the active Walsh channels,

and wherein the second executable portion determines the power, sums the powers, sums the total powers and averages the aggregate power over one of at least one of the at least one slot and fractions of the at least one slot.

17. A computer program product according to Claim 13, wherein the second executable portion estimates the amplitude based upon a power of a signal combination of a traffic symbol and a pilot symbol.

18. A computer program product according to Claim 13 further comprising:

a third executable portion for demodulating the traffic of the user in the supplemental channel of the QAM signal based upon the estimate of the amplitude.